

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

WORK ORDER CHANGES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Insp

Part No: D4132-042 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>60168-1</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.10.06	100	Design changed. PARTS NO LONGER CORRECT	W 10-10-07 JST	SCRAP 9/10.10.06 NEW PARTS MADE TO REV. B	W 10-10-06	S 10/10/07	W 10-10-07 JST	B 10-10-07

NOTE: Date & initial all entries

Work Order ID 60168

June 28, 2010 11:53:41 AM



Page 2

Item ID: D4132-042

Revision ID:

Item Name: Wearplate, RH Fwd

Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

130



Brake NC

Brake NC

Form as per dwg
NC BRAKE

0.00

Memo

I- Form using DT 3179 Die as per Dwg D4132

0.00

DT 961-11

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

150



Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch: _____
Large Fab

0.00

Memo

Weld hard surface using DT _____ as per QSI 004 and Dwg D4132

0.00

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



ES 10/07/13

100% only

Q10.07.14 (1)

Scrap

PTO

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12/07/13	130	Lead to open Rote at .311 to match the jig	SS	12/07/13	③	10.07.13 PSJ/WR	

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NOTE: Date & initial all entries

Work Order ID 60168

June 28, 2010 11:53:42 AM



Page 3

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, RH Fwd

Start Date: 6/29/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/15/10 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

160

QC10- Inspect visual per QS1004- ground welds

0.00



QC

Memo

0.00

Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

180

Grey Sandtex(Ref:4.3.5.6) per QS1005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60168

June 28, 2010 11:53:42 AM



Page 4

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, RH Fwd

Start Date: 6/29/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/15/10 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

200



Small Fab

Small Fab

Memo
1- Bond D4132-3 gasket to inner surface of wearplate using a thin layer of 3M
1300/1300L scotch grip adhesive
Batch: _____

0.00

210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

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NOTE: Date & initial all entries

Work Order ID 60168

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Page 5

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, RH Fwd

Start Date: 6/29/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/15/10 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

220

Identify as per dwg & Stock Location: _____
Packaging

0.00



Packaging

Memo

0.00

Packaging

230

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

MF
10-10-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

June 28, 2010 11:53:40 AM

Page 1

Work Order ID: 60168

Parent Item: D4132-042

Parent Item Name: Wearplate, RH Fwd





Start Date: 6/29/10

Required Date: 7/15/10

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4132-3 		Manufactured	No			200	Each	0.0000	1	2			
Gasket M304S18GA 		Purchased	No			100	sf	132.8779	1.555	3.273684			
304/316 .050 Sheet													

Location

MAT20

111743
112885
113062

Loc Qty

132.8779
8.86
28.0179
96

Loc Code

113062

4-665

HB10-b-29

B

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 60168
Description: WEAR PLATE RH FWD		Part Number: D4132-042
Inspection Dwg: D4132-1 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
300X300	$\pm .010$	300X303	*			
$\phi .703$	$\pm .005 - .001$.704	*			
.415	$\pm .010$.413	x			
.82	$\pm .030$.823	*			
2.74	$\pm .030$	2.731	x			
4.65	$\pm .030$	4.638	*			
5.055	$\pm .010$	5.054	*			
5.47	$\pm .030$	5.467	x			
8.05	$\pm .030$	8.043	*			
.375	$\pm .010$.372	x			
1.92	$\pm .030$	1.917	x			
5.099	$\pm .010$	5.099	*			
9.824	$\pm .010$	9.824				
11.92	$\pm .030$	11.92				
14.548	$\pm .010$	14.548				
19.273	$\pm .010$	19.273				
21.92	$\pm .030$	21.92				
23.63	$\pm .010$	23.613				
27.953	$\pm .010$	27.953				
1.10	$\pm .030$	1.095				
4.37	$\pm .030$	4.361				
11.79	$\pm .030$	11.79				
12.04	$\pm .030$	12.04				
.050	$\pm .010$.050	*			

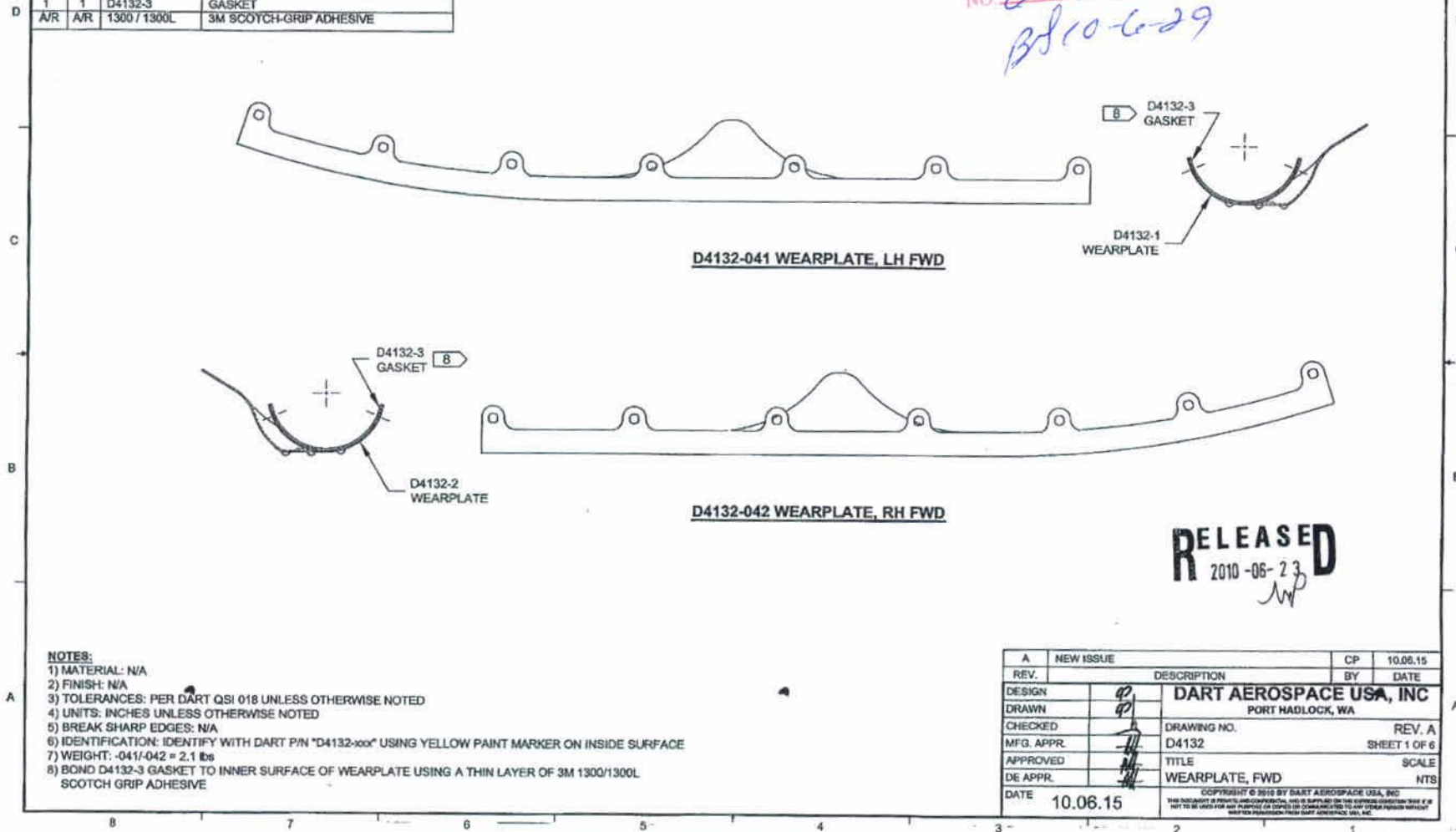
Measured by: HB	Audited by: [Signature]	Prototype Approval: N/A
Date: 10-6-29	Date: 10/06/30	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY

SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 60168
3810-6-29

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X		D4132-041	WEARPLATE, LH FWD
	X	D4132-042	WEARPLATE, RH FWD
1		D4132-1	WEARPLATE
1	1	D4132-2	WEARPLATE
1	1	D4132-3	GASKET
AVR	AVR	1300 / 1300L	3M SCOTCH-GRIP ADHESIVE



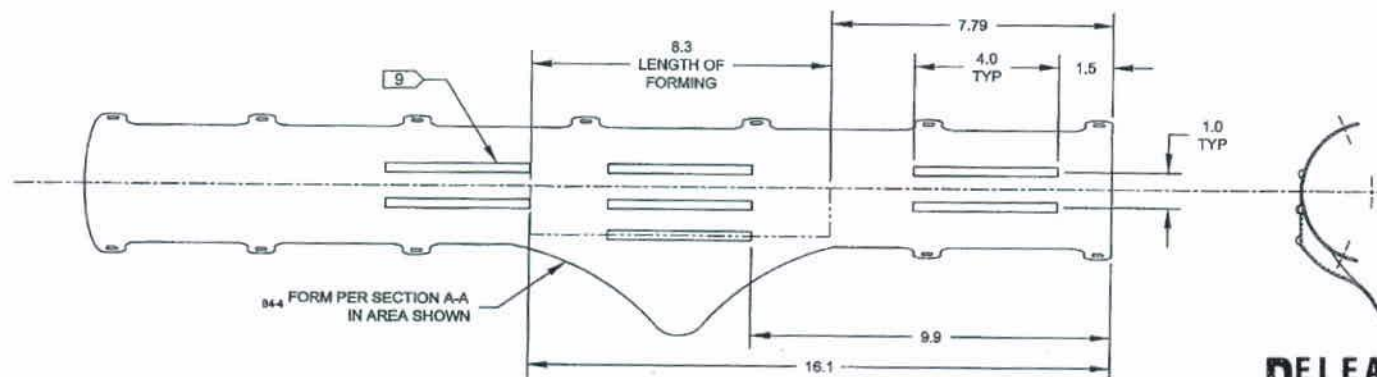
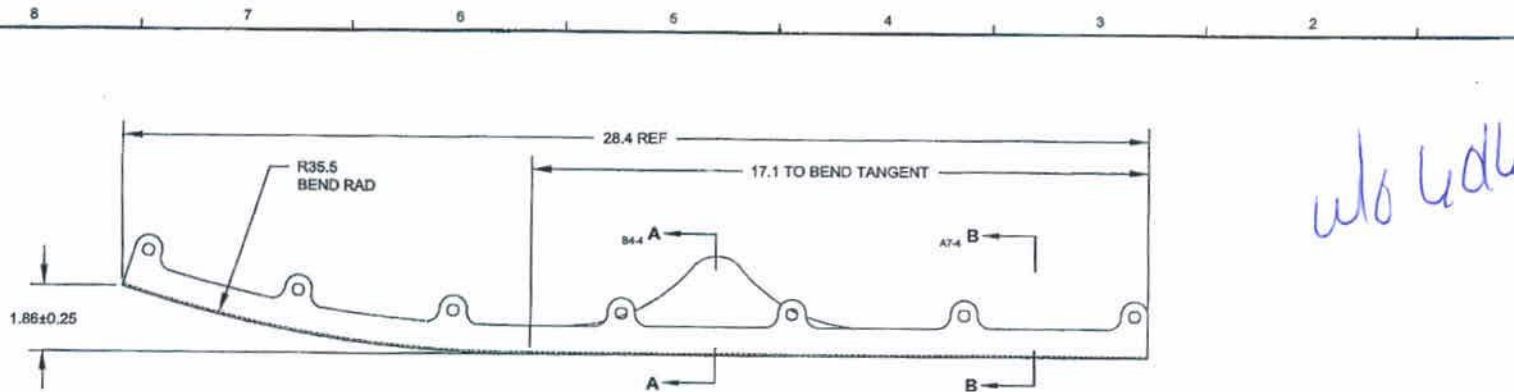
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NOTE: Date & initial all entries



D4132-1 WEARPLATE, LH

NOTES:

- 1) MATERIAL: MAKE FROM D4132-1F
- 2) FINISH: POWDER COAT "GREY SANTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs
- 8) WELD PER QSI 004
- 9) 2059B HARDCOAT WELDS, 0.063 TO 0.125 HIGH

DESIGN	92	DART AEROSPACE USA, INC	
DRAWN	94	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4132	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE, FWD	NTS
DATE	10.06.15	COPYRIGHT © 2015 BY DART AEROSPACE USA, INC	

RELEASED
2010-06-23

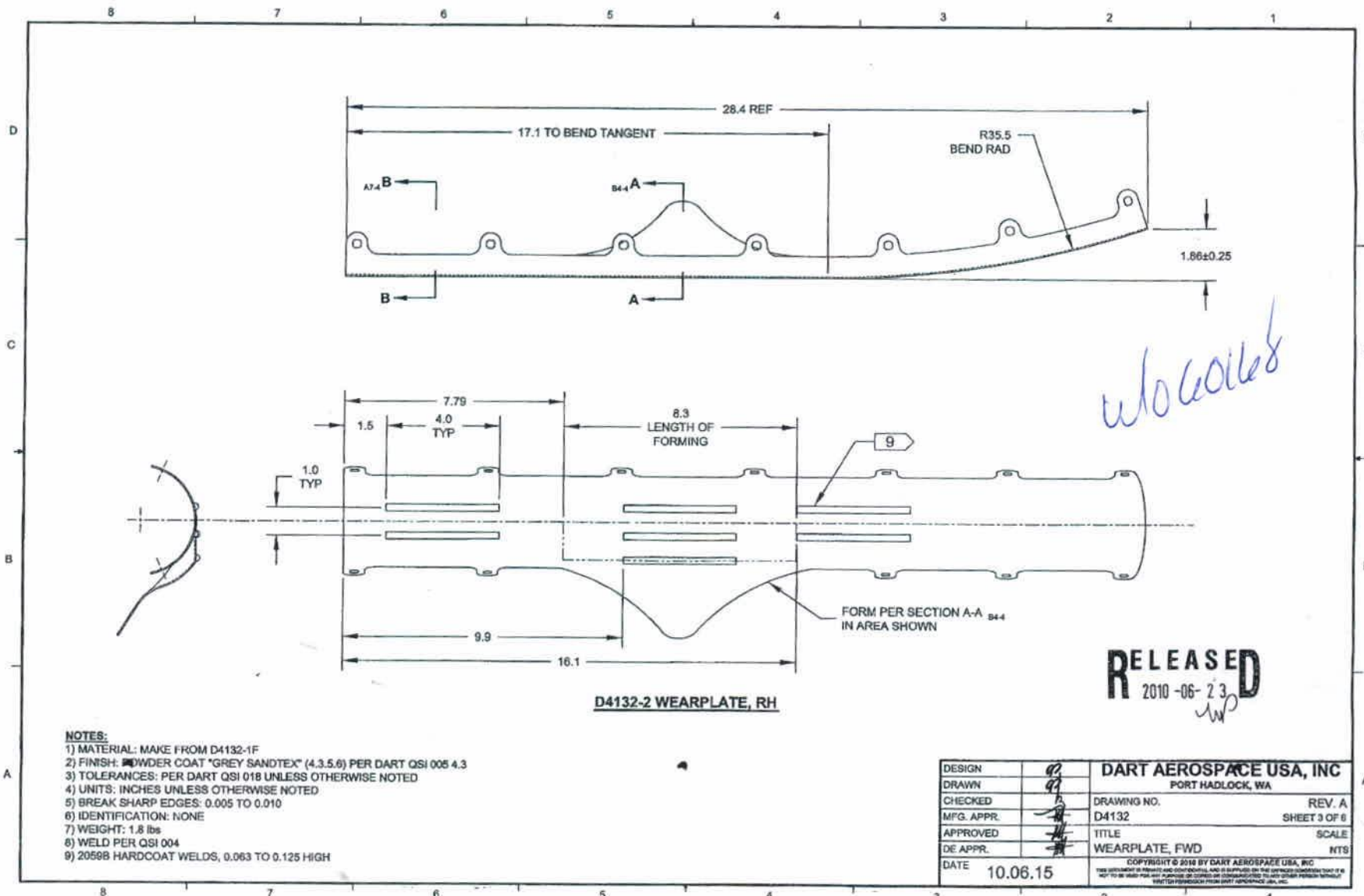
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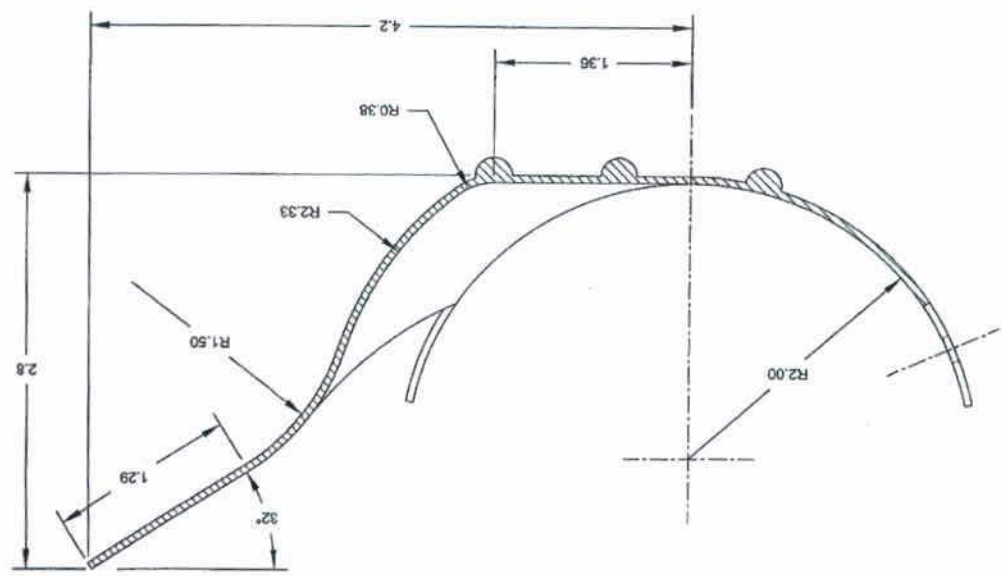
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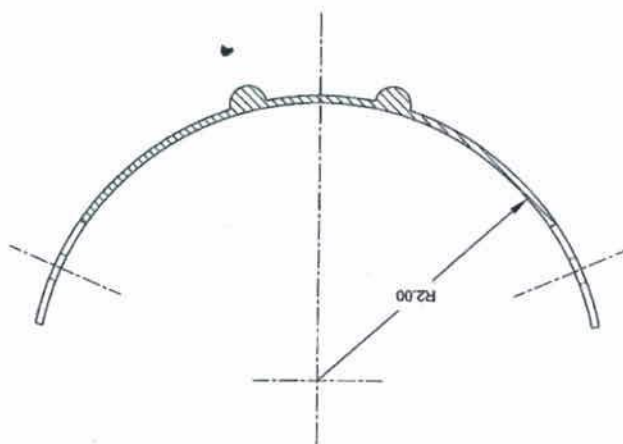
DATE	10.06.15
DESIGN	
DRAWN	
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
WEARPLATE, FWD	
TITLE	
SCALE	
SHEET 4 OF 6	
REV. A	
DRAWING NO.	
D4132	
PORT HADLOCK, WA	
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2010-06-23
WM

SECTION A-A
SCALE 4X



SECTION B-B
SCALE 4X



who wrote it

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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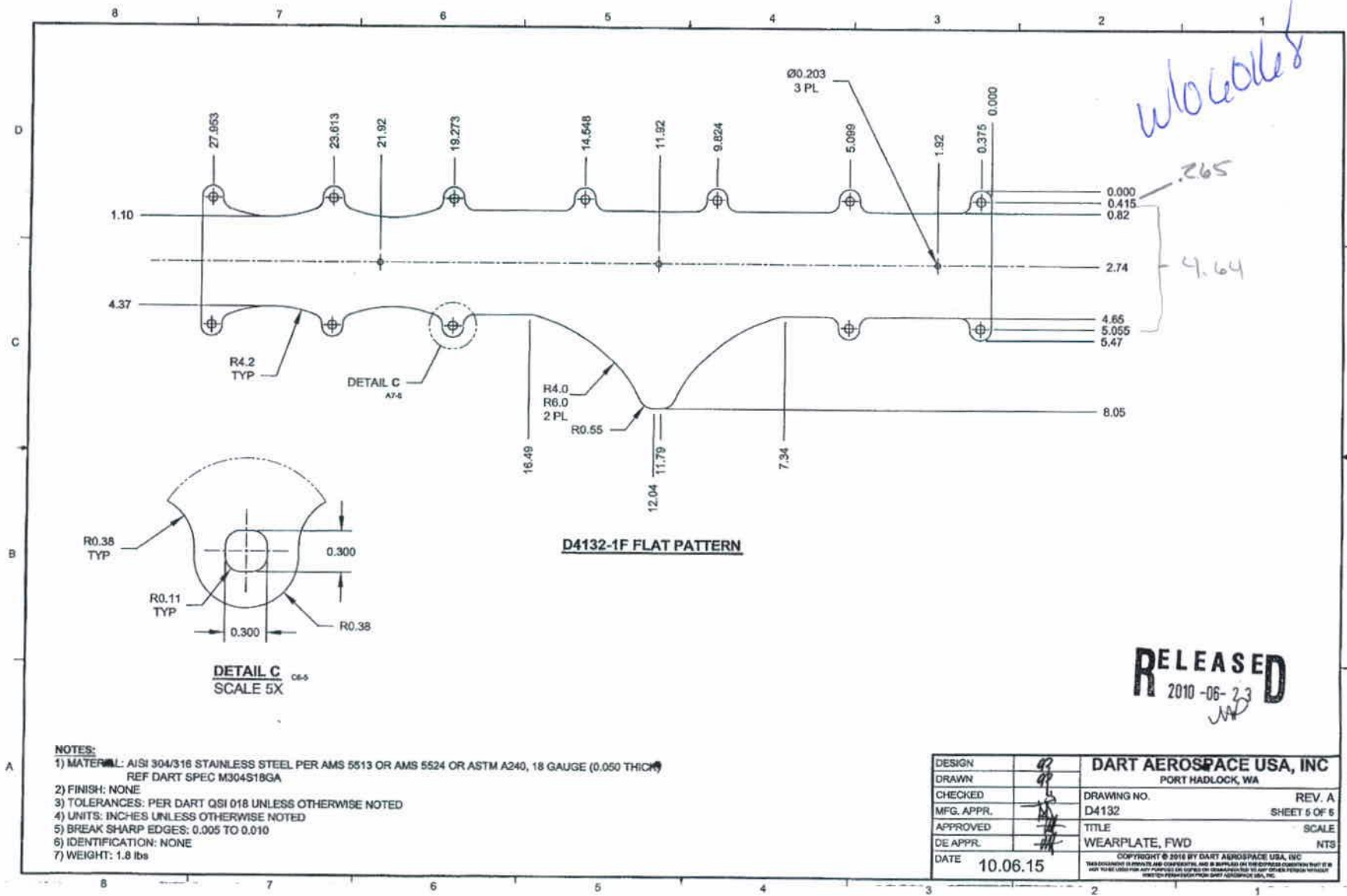
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NOTE: Date & initial all entries

Wloc

265
4.64

RELEASED
2010-06-23
WJ



NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524 OR ASTM A240, 18 GAUGE (0.050 THICK)
REF DART SPEC M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs

DESIGN	92	DART AEROSPACE USA, INC	
DRAWN	92	PORT HADLOCK, WA	
CHECKED	92	DRAWING NO.	REV. A
MFG. APPR.	92	D4132	SHEET 5 OF 6
APPROVED	92	TITLE	SCALE
DE APPR.	92	WEARPLATE, FWD	NTS
DATE	10.06.15	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC	

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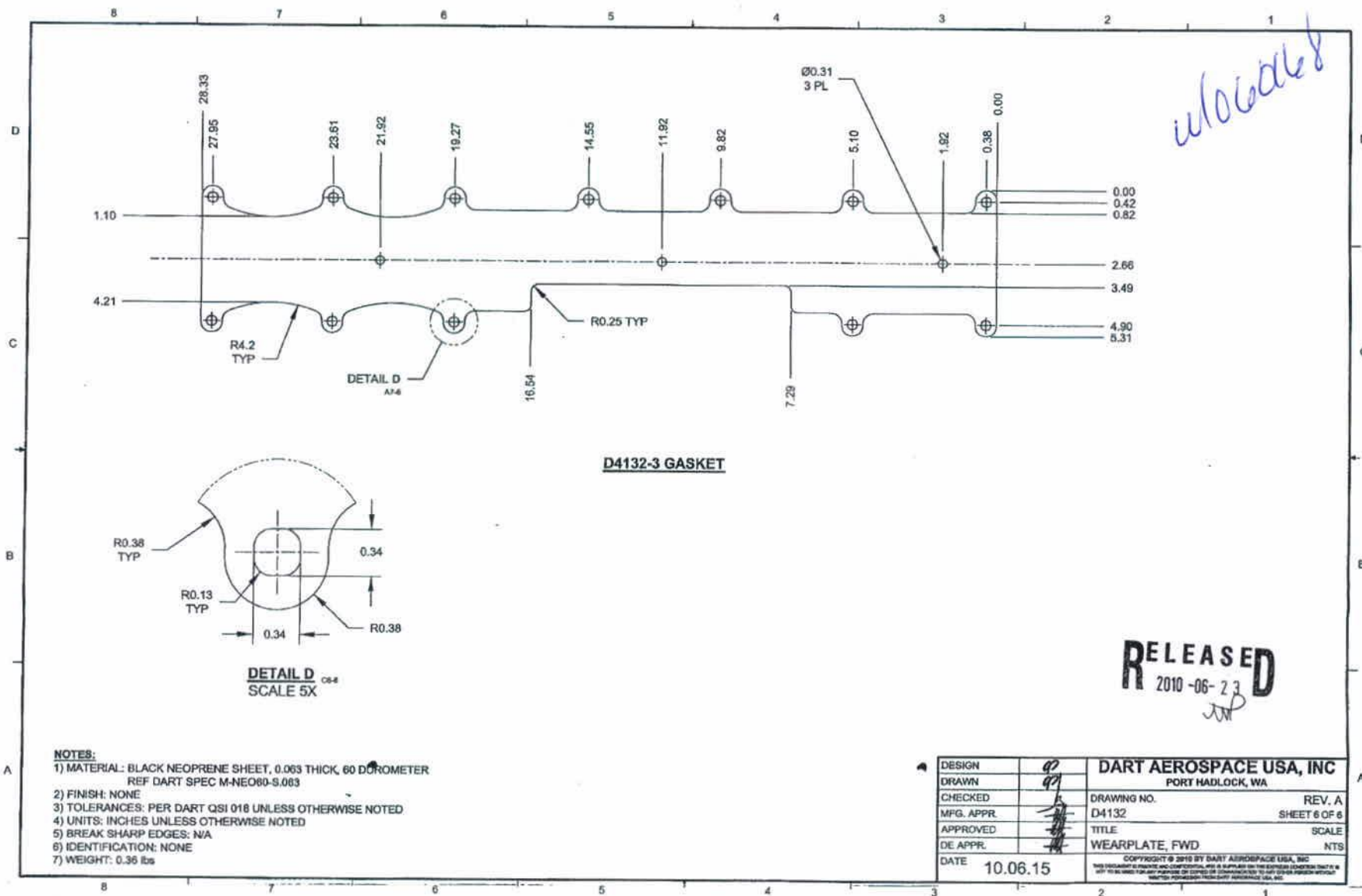
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W06068



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